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10/046,141	01/16/2002	Tetsuo Yamaguchi	2870-0177P	3642

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BIRCH STEWART KOLASCH & BIRCH  
PO BOX 747  
FALLS CHURCH, VA 22040-0747

[REDACTED] EXAMINER

CHEA, THORL

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1752

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Please find below and/or attached an Office communication concerning this application or proceeding.



**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Ito et al (Ito) or JP11-149136 (JP'146) in view of Adin et al (Adin).

Ito a photothermographic material containing non-photosensitive silver halide, photosensitive silver halide, reducing agent for silver ions and binder and the compound of formula (1) to (3) claimed in the present claimed invention, and the amount thereof is within  $1 \times 10^{-6}$  mol to 1 mol/mol of silver halide. Note to the compound of formula (1) to (3) in column 18 and the amount thereof in column 33, lines 22-25. The JP'136 discloses a heat-developable material containing non-photosensitive silver halide, photosensitive silver halide, reducing agent for silver ions and binder and the compound exemplified in the present application disclosure which meet the requirements (1) to (iii) claimed in the present invention, and the amount thereof is from  $1 \times 10^{-6}$  mol to 1 mole/mol of silver halide. See the compound in column 1 (or its English equivalent, US Patent No. 6,177,240, in columns 7-24; and in column 26, lines 37-40). The silver halide emulsion taught in both Ito and JP'136 are spectrally sensitized with a known spectrally sensitizing dyes. Adin discloses a spectrally sensitized within the scope of formula (I) of the claimed invention, and the amount thereof is from  $1 \times 10^{-8}$  to  $2 \times 10^{-3}$  mol

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per mol of silver in the emulsion layer. The compound is capable of enhancing both intrinsic sensitivity and the spectrally sensitivity of the silver halide emulsion, and the activity of the compound can be easily varied with substituents to control their speed and fog effects in a manner appropriate to the particular silver halide in which they are used. Note to the compound in column 4, especially lines 26-38 and 55-65, and the amount thereof in column 60, lines 5-18.

The teaching in Ito and JP'136 differs from the claimed invention in the use of compound of formula (I) which has been known in Adin, wherein the compound is capable of enhancing both intrinsic sensitivity and the spectrally sensitivity of the silver halide emulsion, and the activity of the compound can be easily varied with substituents to control their speed and fog effects in a manner appropriate to the particular silver halide in which they are used. It would have been obvious to the worker of ordinary skill in the art at the time the invention was made to use the dye taught in Adin to spectrally sensitize the silver halide taught in either Ito or JP'136 because of its advantage over the conventional spectrally sensitizing such as discussed above to provide a material claimed in the present claimed invention.

The data shown in the specification disclosure has been considered, but does not overcome the rejection set forth above since it is irrelevant to Ito or JP'136. Moreover, the results shown therein is similar to that taught in Ito and JP'136 in term of Dmax or image contrast.

***Conclusion***

3. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.
4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thorl Chea whose telephone number is (703)308-3498. The examiner can normally be reached on M-F (9:30 - 6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janet C Baxter can be reached on (703)308-2303. The fax phone numbers for the organization where this application or proceeding is assigned are (703)872-9301 for regular communications and (703)872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0661.

Tchea *th*  
December 1, 2002

  
Thorl Chea  
Primary Examiner  
Art Unit 1752